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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/652,413	08/31/2000	Jim B. Estipona	INTL-0443-US(P9558)	4266

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09/27/2004

EXAMINER

SALCE, JASON P

ART UNIT PAPER NUMBER

2611

DATE MAILED: 09/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/652,413

Applicant(s)

ESTIPONA, JIM B.

Examiner

Jason P Salce

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-15 and 17-30 is/are rejected.
- 7) ☒ Claim(s) 5 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 August 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2-4</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statements (IDS) submitted on 10/02/00, 12/08/00 and 4/16/02 were filed on 10/02/00, 12/08/00 and 4/16/02. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner is considering the information disclosure statement.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 40. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to because elements 18 and 50 in Figures 2 and 4 must point to the entire software program and not the first step in the program to emphasis that elements 18 and 50 represent the software program as a whole (as

disclosed in the specification). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claims 4-5 and 15-16 are objected to because of the following informalities: The limitation "trigger time" should be consistent with the limitation "trigger expiration time" previously stated in the independent claims. Appropriate correction is required.

Claims 5 and 16 are also objected to because of the following informalities: The limitation "enhancement start time" should read "enhanced television transmission start time" in order to be consistent with the limitations set forth in claims 1 and 2. The examiner understands that the enhancement start time is the start time of the enhanced

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television transmission, but the limitation enhancement start time does not capture this relation. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 6-13 and 17-22 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Blackketter et al. (U.S. Patent Application Publication 2002/0056129 A1).

Referring to claim 1, Blackketter discloses receiving an enhanced television transmission (see Paragraph 0002, Lines 3-7) including a trigger that points to a resource (see Paragraph 0002, Lines 7-9 for a trigger that points to a URI that identifies an information resource) and has an expires attribute indicating a trigger expiration time (see Paragraph 0009, Lines 1-3 and Lines 7-10 for a trigger that includes a time period that specifies when a trigger is to be executed).

Blackketter also discloses enabling the resource to be accessed after the trigger expiration time (see Paragraph 0009, Lines 6-9 for only executing the trigger after the future (expiration) time).

Referring to claims 2, Blackketter discloses rebroadcasting the enhanced television transmission (see Paragraph 0065, Lines 1-3 for rebroadcasting the enhanced (includes the trigger) television program).

Referring to claim 3, Blackketter discloses differencing the current time and the trigger expiration time (see Claim 7 on Page 7). The examiner notes that claim 7 recites the limitation "comparing", which is equivalent to differencing the current and future time (when they are compared, the difference (greater than, less than or equal to) is determined), in order to determine if the future time has passed in order to access the desired interactive resource.

Referring to claim 6, Blackketter discloses recording said enhanced television transmission for subsequent replay (see Paragraph 0067, Lines 1-10 for recording the television content and triggers for subsequent replay).

Referring to claims 7-8, see the rejection of claim 3.

Referring to claim 9, Blackketter discloses recording the enhanced television program (see Paragraph 0067, Lines 1-6 for receiving on a receiver unit a recorded video program along with triggers stored on a recording medium and Paragraph 0065 for a tape-delayed broadcast). Applicant does not specify in claim 6 the relationship between recording the program and the trigger executing at a trigger expiration time. Since the claims do not specify when a trigger reaches a trigger expiration time or not, in relation to recording the program, the examiner will interpret claim 9 as only recording triggers onto a recording medium when the program is being recorded, and where a trigger expiration time can occur anytime before, after or during the recording.

Therefore, when the difference between the trigger time and the current time is not greater than zero (the trigger time is less than the current time, meaning that the trigger expiration time has not occurred), and the program is recorded well after the trigger expiration time, the trigger is inherently discarded before the recording of the program. The examiner notes that as long as the trigger occurs during the recording of the program, only then will it be stored for subsequent replay (see again Paragraph 0067).

Referring to claim 10, Blackketter discloses that if the difference is greater than zero (the trigger time is greater than the current time, meaning that the trigger expiration time has occurred), discarding the trigger expiration time and recording the trigger (see again Paragraph 0067 for received a stored program with it's associated triggers). The examiner notes that since the replayed program from a recording medium is accompanied by it's associated triggers (at a time different from the trigger expiration time), then upon recording the program with the triggers, the trigger expiration time would inherently have to be discarded, while the trigger itself recorded because the trigger is now executed at a time relative to the recorded program being replayed at a later time (see Paragraph 0067 for the receiving unit receiving the program and the triggers together when replayed).

Referring to claim 11, Blackketter discloses receiving an enhanced television transmission having a trigger that refers to a remote resource (see Paragraph 0045, Lines 7-9), accessing said remote resource and storing said remote resource (see Paragraph 0046).

Referring to claims 12-13, see the rejection of claims 1-2, respectively.

Referring to claim 17, Blacketter discloses that an enhanced television transmission can be recorded for subsequent replay (see Paragraph 0067, Lines 1-6 for recording the television content and accompanying triggers) and that both the television content and the enhancement accompanying the television content (triggers) are recorded (see Paragraph 0067, Lines 7-10 for receiving the recorded content and triggers upon replay).

Referring to claims 18-19, see the rejection of claim 3.

Referring to claims 20-21, see the rejection of claims 9-10, respectively.

Referring to claim 22, see the rejection of claim 11.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blacketter et al. (U.S. Patent Application Publication 2002/0056129 A1) in view of Steinhorn et al. (How to Enhance TV with ATVEF, October 1999). Referring to claim 4, Blacketter discloses determining whether the trigger expiration time (future time) is greater than or not greater than the current time (see determining if the future time attribute (disclosed in Paragraph 0009 of Blacketter) has been reached). For example,

if the current time is 4pm and the trigger expiration time is 3pm, then the trigger expiration time has already been passed.

Blackketter fails to teach discarding a trigger, in the event that a trigger expiration time has already been passed. Steinhorn discloses discarding older ATVEF streams (which include triggers, see "Transports" section, 4th Paragraph).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the trigger receiver (101 in Figure 1), as taught by Blackketter, using the content storage management process, as disclosed by Steinhorn, for the purpose of preventing the receiver's memory from becoming full so that incoming data can be stored for processing (see "Transports" section, 4th Paragraph of Steinhorn).

Referring to claim 15, see the rejection of claim 4.

6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blackketter et al. (U.S. Patent Application Publication 2002/0056129 A1) in view of Vijay (Computer Hardware and Software).

Referring to claim 14, Blackketter discloses differencing the current time and the trigger expiration time (see Claim 7 on Page 7). The examiner notes that claim 7 recites the limitation "comparing", which is equivalent to differencing the current and future time (when they are compared, the difference (greater than, less than or equal to) is determined), in order to determine if the future time has passed in order to access the desired interactive resource. Therefore, Blackketter only discloses a logical operation,

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furthermore, Blackketter is silent about a CPU and only discusses how the incoming trigger data and current times are processed.

Blackketter fails to disclose that the differencing between the current time and trigger expiration time involves a subtract operation (arithmetic operation) by a processor. Vijay discloses that a CPU includes both logical and arithmetic operations, such as a subtraction operation (see Page 4, "The Processor").

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the receiver unit 101, as taught by Blackketter, using the CPU, as taught by Vijay, for the purpose of providing arithmetic operations such as addition, subtraction, multiplication and division (see Page 4, "The Processor") in order to specify precise numerical values instead of only determining a proximity value by a comparison operation.

7. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blackketter et al. (U.S. Patent Application Publication 2002/0056129 A1) in view of Vijay (Computer Hardware and Software) in further view of Steinhorn et al. (How to Enhance TV with ATVEF, October 1999).

Claim 15 corresponds to claim 14, where Blackketter and Vijay disclose all of the limitations in claim 15, as well as Blackketter disclosing whether the trigger expiration time (future time) is greater than or not greater than the current time (see determining if the future time attribute (disclosed in Paragraph 0009 of Blackketter) has been

reached). For example, if the current time is 4pm and the trigger expiration time is 3pm, then the trigger expiration time has already been passed.

Blackketter fails to teach discarding a trigger, in the event that a trigger expiration time has already been passed. Steinhorn discloses discarding older ATVEF streams (which include triggers, see "Transports" section, 4th Paragraph).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the trigger receiver (101 in Figure 1), as taught by Blackketter and Vijay, using the content storage management process, as disclosed by Steinhorn, for the purpose of preventing the receiver's memory from becoming full so that incoming data can be stored for processing (see "Transports" section, 4th Paragraph of Steinhorn).

8. Claims 23-26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blackketter et al. (U.S. Patent Application Publication 2002/0056129 A1) in view of Zigmond et al. (U.S. Patent No. 6,571,392).

Referring to claim 23, Blackketter discloses receiving an enhanced television transmission (see Paragraph 0002, Lines 3-7) including a trigger that points to a resource (see Paragraph 0002, Lines 7-9 for a trigger that points to a URI that identifies an information resource) and has an expires attribute indicating a trigger expiration time (see Paragraph 0009, Lines 1-3 for a trigger that includes a time period that specifies when a trigger is to be executed).

Blackketter also discloses enabling the resource to be accessed after the trigger expiration time (see Paragraph 0009, Lines 6-9 for only executing the trigger after the future (expiration) time).

Blackketter is silent in regards to receiving unit 101 in Figure 1 containing a processor and storage containing instructions to perform the functions disclosed above.

Zigmond discloses a similar system, which also receives and stores triggers for future accessing of a URL, and also discloses a processor (element 303 in Figure 4) and a storage (element 304 in Figure 4) which stores instructions to execute receiving the television broadcast and triggers (see Column 5, Lines 54-58, Column 6, Lines 4-11 and Lines 25-31).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the receiver 101, as taught by Blackketter, to utilize the processor and storage, as taught by Zigmond, for the purpose of checking the digitized signal for errors thereby recovering the information resource successfully (see Column 5, Lines 56-59 of Zigmond).

Claim 24 corresponds to claim 23, where Blackketter discloses recording said enhanced television transmission for subsequent replay (see Paragraph 0067, Lines 1-10 for recording the television content and triggers for subsequent replay).

Claim 25 corresponds to claim 23, where Blackketter discloses rebroadcasting the enhanced television transmission (see Paragraph 0065, Lines 1-3 for rebroadcasting the enhanced (includes the trigger) television program).

Claim 26 corresponds to claim 25, where Blackketter discloses differencing the current time and the trigger expiration time (see Claim 7 on Page 7). The examiner notes that claim 7 recites the limitation "comparing", which is equivalent to differencing the current and future time (when they are compared, the difference (greater than, less than or equal to) is determined), in order to determine if the future time has passed in order to access the desired interactive resource.

Claim 28 corresponds to claim 23, where Blackketter discloses receiving an enhanced television transmission having a trigger that refers to a remote resource, accessing said remote resource and storing said remote resource (see Paragraphs 0033 and 0045).

9. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blackketter et al. (U.S. Patent Application Publication 2002/0056129 A1) in view of Zigmond et al. (U.S. Patent No. 6,571,392) in further view of Steinhorn et al. (How to Enhance TV with ATVEF, October 1999).

Referring to claim 27, Blackketter and Zigmond disclose all of the limitations in claim 26, as well as determining whether the trigger expiration time (future time) is greater than or not greater than the current time (see determining if the future time attribute (disclosed in Paragraph 0009 of Blackketter) has been reached). For example, if the current time is 4pm and the trigger expiration time is 3pm, then the trigger expiration time has already been passed.

Blackketter and Zigmond fail to teach discarding a trigger, in the event that a trigger expiration time has already been passed. Steinhorn discloses discarding older ATVEF streams (which include triggers, see "Transports" section, 4th Paragraph).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the trigger receiver (101 in Figure 1), as taught by Blackketter and Zigmond, using the content storage management process, as disclosed by Steinhorn, for the purpose of preventing the receiver's memory from becoming full so that incoming data can be stored for processing (see "Transports" section, 4th Paragraph of Steinhorn).

10. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blackketter et al. (U.S. Patent Application Publication 2002/0056129 A1) in view of Zigmond et al. (U.S. Patent No. 6,571,392) in further view of Dillon (U.S. Patent No. 6,351,467).

Referring to claim 29, Blackketter and Zigmond disclose all of the limitations in claim 28, as well as a type A transmission (receiving a URL that links to a web-site along with the television signal) (see Paragraph 0031 for Blackketter and Zigmond both supporting type A transmissions).

Blackketter and Zigmond fail to disclose converting a type A transmission to a type B transmission. Dillion discloses a system that also transmits television content along with supplemental data, however, instead of just sending the URL link in a trigger, as taught by Blackketter and Zigmond, Dillion teaches sending the entire web page to

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the receiver so that the URL can be accessed locally (see Column 4, Lines 31-33). In order to access the entire set of web page data for transmission to a receiver, the system must use retrieve the information by accessing web sites through back-end system 22 in Figure 2 (see Column 8, Lines 36-42). The headend subsystem 52 in Figure then takes the entire set of web page data and multiplexes it with the digital video content from another broadcast source (see Column 15, Lines 27-34). Therefore Dillon converts a type A transmission (URL link embedded in a TV program) to a type B transmission (entire URL page embedded in a TV program).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the system for transmitting a URL to a receiver, as taught by Blackketter and Zigmond, utilizing the Webcast system for transmitting the entire set of web content to a receiver, as taught by Dillon, for the purpose of allowing a user to access a web page at "hard disk" speed (see Column 4, Lines 34-35 of Dillon).

11. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blackketter et al. (U.S. Patent Application Publication 2002/0056129 A1) in view of Zigmond et al. (U.S. Patent No. 6,571,392) in further view of Scott et al. (U.S. Patent No. 6,338,094).

Referring to claim 30, Blackketter and Zigmond disclose all of the limitations in claim 28, but fail to teach making a resource available at a new location and translating said trigger to point to the new location.

Scott discloses an updated link to a web page at a service center, where the service center provides a URI (trigger) to the receiver that directs the client device to the service center, which then redirects the client device to the web page (by sending another URI trigger) with the new location (see Column 7, Lines 23-26 and Column 8, Lines 14-21).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the system for receiving triggers, as taught by Blacketter and Zigmond, to utilize the trigger location redirection feature, as taught by Scott, for the purpose of avoiding the use of broken web page link in case the location of the web page has changed (see Column 8, Lines 17-18 of Scott).

Allowable Subject Matter

12. Claims 5 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance:

The prior art of record failed to anticipated or rendered obvious dependent claims 5 and 16. The limitation, "retransmitting the trigger with a trigger expiration time equal to the time when the enhanced television transmission will be rebroadcast plus the difference between the trigger expiration time and the enhanced television transmission start time" is not taught by the prior art of record.

Kalluri et al. (U.S. Patent No. 5,937,331) teaches an error recovery state 708 in Figure 7 (see Column 9, Lines 22-30), which determines an offset between the trigger start time and a current time for determining when playing of a file should continue in relation to the start time of the trigger (see Column 9, Lines 31-35). The error recovery state 708 is not an error correction method used in the case of a rebroadcast program, as taught by the applicant, therefore the time when the enhanced television transmission is not factored into the error correction method of Kalluri. Kalluri also fails to teach retransmitting a trigger with a new trigger expiration time, only correcting the time the interactive program source 58 begins play of the file as determined by the error recovery unit 72 (see Column 9, Lines 34-36).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason P Salce whose telephone number is (703) 305-1824. The examiner can normally be reached on M-Th 8am-6pm (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (703) 305-4755. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 14, 2004

A handwritten signature in black ink, appearing to be "Jann" followed by a stylized flourish.